

L Number	Hits	Search Text	DB	Time stamp
1	1	"6738964" and (updat\$3 or dynamic\$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 21:29
2	1	"6738964" and (updat\$3 or dynamic\$4) and sync\$12	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 21:29
3	1	"6738964" and (updat\$3 or dynamic\$4) and ("same time" or concurrent\$2 or sync\$12)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 21:44
4	1	"6738964" and (updat\$3 or dynamic\$4) and ("same time" or concurrent\$2 or sync\$12) and (display\$4 or view\$3 or visual\$9)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 21:51
5	1	"6738964" and (updat\$3 or dynamic\$4) and ("same time" or concurrent\$2 or sync\$12) and (display\$4 or view\$3 or visual\$9) and (cpu or processor\$1 or microprocesor\$1 or controller\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 21:53
6	35	"5850548"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 22:16
7	9	"5950001"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 22:16

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1	1	"6738964" and (updat\$3 or dynamic\$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 21:29
2	1	"6738964" and (updat\$3 or dynamic\$4) and sync\$12	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 21:29
3	1	"6738964" and (updat\$3 or dynamic\$4) and ("same time" or concurrent\$2 or sync\$12)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 21:44
4	1	"6738964" and (updat\$3 or dynamic\$4) and ("same time" or concurrent\$2 or sync\$12) and (display\$4 or view\$3 or visual\$9)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 21:51
5	1	"6738964" and (updat\$3 or dynamic\$4) and ("same time" or concurrent\$2 or sync\$12) and (display\$4 or view\$3 or visual\$9) and (cpu or processor\$1 or microprocesor\$1 or controller\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 21:53
6	35	"5850548"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 22:16
7	9	"5950001"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 23:02
8	13893	(\$5processor or process\$4) near3 waveform	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 23:06
9	488	(\$5processor or process\$4)near10(connect\$4 or coupl\$4) near10(\$5processor or process\$4) near3 waveform	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 23:07
10	29	display\$4 near3(\$5processor or process\$4)near10(connect\$4 or coupl\$4) near10(\$5processor or process\$4) near3 waveform	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 23:09
11	5	display\$4 near3(\$5processor or process\$4)near10(connect\$4 or coupl\$4) near10(\$5processor or process\$4) near3 waveform and (web or net or intnet or network)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 23:10
12	1	display\$4 near3(\$5processor or process\$4)near10(connect\$4 or coupl\$4) near10(\$5processor or process\$4) near3 waveform and (web or net or intnet or network) and (spectrum adj analyz\$4 or oscilloscope\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 23:11
13	1	display\$4 near3(\$5processor or process\$4)near10(connect\$4 or coupl\$4) near10(\$5processor or process\$4) near3 waveform and (web or net or intnet or network or lan or wan) and (spectrum adj analyz\$4 or oscilloscope\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 23:14

14	10	display\$4 near3(\$5processor or process\$4)near10(connect\$4 or coupl\$4) near10(\$5processor or process\$4) near3 waveform and (spectrum adj analyz\$4 or oscilloscope\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 23:19
15	14	display\$4 near3(\$5processor or process\$4)near10(connect\$4 or coupl\$4) near10(\$5processor or process\$4) near3 waveform and (spectrum adj analyz\$4 or oscilloscope\$1 or net or network or web or web\$4 or internet or network or lan or wan)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 23:21
16	1	display\$4 near3(\$5processor or process\$4)near10(connect\$4 or coupl\$4) near10(\$5processor or process\$4) near3 waveform and (spectrum adj analyz\$4 or oscilloscope\$1) and (net or network or web or web\$4 or internet or network or lan or wan)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 23:21

Detailed Description Text - DETX (8):

The primary function of interconnect chips 20(a)-(c) (which may be referred to herein also as mux chips or QT mux chips) is to provide connectivity between logic circuits in the logic modules 18(a)-(c) as well as to provide connectivity to signals originating outside of emulation array 16, such as signals originating in the user's external system 28, as well as external VLSI devices 30 and external memory devices 32 which may be part of the emulated design or may be included in the user's system which includes the emulated design. Each interconnect chip 20 acts as a crosspoint switch where each pin can be defined as either an input or an output, and each input can be connected to any output or group of outputs. The Xilinx XC3090 provides an interconnect capability which is satisfactory for the present invention. However, it is presently preferred to use a custom designed interconnect chip having 168 input/output pins. Interconnect chips of this type are currently obtained from National Semiconductor Corporation of Santa Clara, Calif. Further, in a presently preferred embodiment, each interconnect chip 20 is connected by one or more conductors to each logic chip 18 and also has additional connections to external signals. The functionality of and interaction between logic chips 18(a)-(c) and interconnect chips 20(a)-(c) may be more easily seen with reference to FIG. 2.

Detailed Description Text - DETX (52):

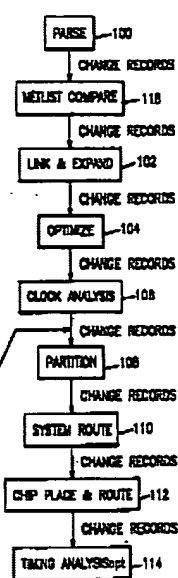
Referring now to FIG. 1, the PBUS 30, which is discussed more fully below, is used to program and monitor all the LCAs and QT mux chips in the system, and to configure the low skew nets. The emulation board supports 44 PBUS signals which are described more fully in section 1.4.1 below.

Detailed Description Text - DETX (56):

The clock distribution network is shown in FIGS. 8 and 9. Referring to FIG. 8, clocks are routed to the system board on the nets GLOB.sub.--xx.sub.--S.sub.--0:5. Clocks may be driven onto these nets from the emulation boards or the mux boards through the mux chips labelled MC 0:5. There are actually six separate nets routed from each emulation and mux board to the system board, rather than a common bus as shown on the drawing. Each set of backplane nets is designed to have the same length to minimize skew.

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INCREMENTAL



EMULATION

CONTROL FLOW

14

L Number	Hits	Search Text	DB	Time stamp
1	354	oscilloscope and web and processing	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:05
2	43	oscilloscope and web and processing and editing	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:09
3	24	oscilloscope and web and processing and editing and (pin or pins) near10 connect\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:05
4	23	oscilloscope and web and processing and editing and (pin or pins) near10 connect\$3 same (input\$1 and output\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:06
5	23	oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:10
6	7	oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) near10 (input\$1 and output\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:10
7	0	oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1)same updat43	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:06
8	5	oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1)same updat\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:11
9	5	oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1)same sync\$12	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:07
10	5	((oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1)same updat\$3) or (oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1)same sync\$12)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:07
11	6753	((oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1)same updat\$3) or 6r (oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1)same sync\$12)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:08
12	10	((oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1)same updat\$3) or (oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1)same sync\$12)) or (oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) near10 (input\$1 and output\$1))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:08
13	184	oscilloscope and (network or internet or web) and processing and editing	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:17

14	45	oscilloscope and (network or internet or web) and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:09
15	27	oscilloscope and (network or internet or web) and processing and editing and ((pin or pins) near10 connect\$3) near10 (input\$1 and output\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:10
16	5	oscilloscope and (network or internet or web) and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1) same (sync\$12 and updat\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:11
17	122	oscilloscope and (network or internet or web) and processing and editing and configur\$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:17
18	42	oscilloscope and (network or internet or web) and processing and editing and configur\$4 and (oscilloscope and (network or internet or web) and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:17
19	25	oscilloscope and (network or internet or web) and processing and editing and configur\$4 and (oscilloscope and (network or internet or web) and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1)) and (oscilloscope and (network or internet or web) and processing and editing and ((pin or pins) near10 connect\$3) near10 (input\$1 and output\$1))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:18
20	7	oscilloscope and (network or internet or web) and processing and editing and configur\$4 and (oscilloscope and (network or internet or web) and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1)) and (oscilloscope and (network or internet or web) and processing and editing and ((pin or pins) near10 connect\$3) near10 (input\$1 and output\$1)) and ((oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1) same updat\$3) or (oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) same (input\$1 and output\$1) same sync\$12)) or (oscilloscope and web and processing and editing and ((pin or pins) near10 connect\$3) near10 (input\$1 and output\$1)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/08 19:18